

**REMARKS**

Claims 1, 3-13, and 7-24 are pending in this application. By this Amendment, claim 13 is amended. The amendment introduces no new matter. Reconsideration of the application based on the above amendment and the following remarks is respectfully requested.

Claims 23 and 24 are withdrawn from consideration as being directed to a non-elected invention. The withdrawal of claims 23 and 24 is respectfully traversed.

Claims 23 and 24 do not constitute independent and distinct species from that of the originally elected claims. Claim 23 is directed to a heterogeneous device wherein the recited element, "the plurality of heterogeneous circuit is further limited so that the plurality of heterogeneous circuit devices in the photodiode formed on the same plane." Also, claim 24 further limits 13 so that the claimed element "substrate" includes a silicon-on-insulated wafer having a single crystal-silicon layer, a substrate and an insulated layer therebetween, and wherein the plurality of heterogeneous circuit devices and a photodiode are formed above the insulator layer. Since both claims 23 and 24 further limit claim 13 and are dependent on claim 13, they are not independent and distinct species from the originally elected claims.

Also, it is respectfully submitted that the subject matter of claims 23 and 24 are sufficiently related to the subject matter of the other claims that a thorough search of the subject matter of any claim would encompass a search for the subject of the remaining claims. Thus, it is respectfully submitted that a search and an examination of the all the claims could be made without serious burden. See MPEP §803 in which it is stated that, "if the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." It is respectfully submitted that this policy should apply in the present

application in order to avoid unnecessary delay and expense to Applicants in duplicate of examination by the Patent Office.

Therefore, withdrawal of the constructive election of species is respectfully requested.

Claim 13 is rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

Claim 13 is amended to obviate the rejection.

Accordingly, withdrawal of the rejection to claim 13 under 35 U.S.C. §112, first paragraph, is respectfully requested.

Claims 1, 4-13, and 17-20 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,477,065 to Nakagawa. This rejection is respectfully traversed.

In reviewing the anticipation standard, the Federal Circuit has stated "[t]o anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown v. 3M*, 265 F.3d 1349, 1351, 60 USPQ2d 1375 (Fed. Cir. 2001), *cert. denied*, 122 S. Ct. 1436 (2002) (emphasis added). Additionally, other court precedent clarifies the requirements for anticipation, stating that "the reference ... must clearly and unequivocally disclose the claimed compound or direct those skilled in the art to the compound without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference." *In re Arkley*, 455 F.2d 586, 587, 172 USPQ 524 (CCPA 1972); *see also Sandisk Corp. v. Lexar Media, Inc.*, 91 F. Supp. 2d 1327, 1336 (N.D. Calif. 2000) (stating that "[u]nless all the elements are found in a single piece of prior art in exactly the same situation and united the same way to perform the identical function, there is no anticipation.") and *Aero Industries Inc. v. John Donovan Enterprises-Florida Inc.*, 53 USPQ2d 1547, 1555 (S.D. Ind. 1999) (stating that "[n]ot only must a prior patent or publication contain all of the claimed elements of the patent claim being challenged, but they 'must be arranged as in the patented device' ").

This standard for anticipation is also set forth in MPEP §2131, which states that "the identical invention must be shown in as much detail as is contained in the . . . claim." Further, although the same terminology need not be used, "the elements must be arranged as required by the claim."

The Office Action improperly ignores these requirements for anticipation by modifying the CMOS embodiment of Fig. 12d to introduce the photoelectrode embodiment of Fig. 13a and the embodiment of DMOS embodiment of Fig. 35. Clearly, the standard for anticipation is not met with the broadly construed language that a semiconductor element chip 1 can have one or more elements formed thereon in the same manner as in the other embodiments (Col. 8, lines 53-55). Because Nakagawa fails to teach elements that can reasonably be considered to correspond to the positively recited claim features arranged as in the claim, *i.e.* arranged on the same substrate, and because the Office Action improperly picks and chooses elements from varying embodiments, the combination of all of the features positively recited in claim 13 cannot reasonably be shown to be anticipated by Nakagawa.

Claim 13 recites, among other features, a plurality of heterogeneous circuit devices defined in the same substrate, the plurality of heterogeneous circuit devices including at least one complementary metal oxide semiconductor transistor in at least one double-diffused metal oxide semiconductor transistor; and a photodiode defined in the same substrate. For at least the reasons discussed above, Nakagawa cannot be reasonably be considered to teach, or to have suggested at least this combination of features of independent claim 13.

Applicants further respectfully submit that the rejection under 35 U.S.C. §102 over Nakagawa is improper because the rejection relies upon the modification of the teachings of the reference. The teachings of a reference must be modified to achieve the arrangement of the features recited in the claim, rejection of 35 U.S.C. §102 is improper.

For at least the above reasons, the Nakagawa reference cannot reasonably be

considered to teach, or have suggested, the combination of all the features positively recited in independent claim 13. Further, claims 1, 3-12, and 17-24 are also neither taught, nor would they have been suggested, by the applied prior art reference for at least the respective dependence of these claims directly or indirectly on allowable base claims, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of the claims 1, 3-13, and 17-24 under 35 U.S.C. §102(b) as being anticipated by Nakagawa are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Jeoyuh Lin  
Registration No. 56,032

JAO:JL/tjx

Date: March 28, 2007

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 24-0037
--